

PROCEEDINGS OF LEARNED SOCIETIES.

GEOLOGICAL SOCIETY.

February 25th, 1903.—Prof. Charles Lapworth, LL.D., F.R.S.,
President, in the Chair.

The following communication was read:—

‘On the Occurrence of *Dictyozamites* in England, with Remarks on European and Eastern Floras.’ By Albert Charles Seward, Esq., M.A., F.R.S., F.L.S., F.G.S., Fellow of Emmanuel College, Cambridge.

The specimens described as a new species of *Dictyozamites* were obtained from a bed of ironstone, low down in the Estuarine Series, on the northern face of the Upleatham outlier, near Marske-by-the-Sea, by the Rev. John Hawell, F.G.S. The genus is also found in the Rajmahal Series of India, in Central Japan, and at Bornholm. Its probable taxonomic position is best expressed by placing it as a member of the Cycadophyta.

The Author proceeds to a comparison of the Bornholm, Indian, Japanese, and English floras; and as resemblances are masked by the use of different generic or specific names for plants which are either identical or represent closely-allied members of the same family, a special list of these floras has been prepared, in which, while the names at present in use are indicated, it is pointed out where obscured identities or resemblances exist. From this comparison the Author concludes that there was a greater similarity between the vegetation of Eastern and Western regions, during part at least of the Mesozoic Era, than is usually admitted; while the differences between Mesozoic floras of approximately the same geological age are for the most part slight and unimportant, when their wide geographical separation is considered. Equisetaceous plants are practically ubiquitous: several ferns of apparently the same species occur in the Far East and in Western Europe; cycadaceous plants are represented by cosmopolitan types, and the same may be said of the genus *Araucarites* and other members of the Coniferæ. The most noteworthy exceptions are afforded by the Mesozoic representatives of the two isolated recent ferns *Matonia* and *Dipteris*; these two families—each with a surviving genus—played a conspicuous part in the vegetation of the Rhaetic and succeeding Jurassic Epochs in Europe, and to a less extent in North America, but there are no satisfactory records of their existence in India or Japan. A similar state of things is illustrated by the Ginkgoales, the class of which the ‘maidenhair-tree’ of China and Japan forms the solitary survivor; the abundance of both *Ginkgo* and *Baiera* in the Mesozoic of Europe is in striking contrast to their almost complete absence in India.